

ARTICLE COMPRISING A MULTI-CHANNEL
DISPENSING HEAD

ABSTRACT

A multi-channel fluid dispenser includes a reservoir with multiple internal chambers,
5 a multi-channel liquid dispensing head, a plurality of fluid-delivery conduits, and support and
positioning elements. The fluid-delivery conduits receive liquid from the chambers in the
reservoir and deliver it to the dispensing head. The support and positioning elements are
operable to support and position the dispensing head so that it can deliver the liquid from the
reservoir to an underlying receiver. The fluid-delivery conduits include one or more optional
10 flow control features that improve the accuracy of the dispensing operation. The multi-
channel liquid dispensing head, which includes a valve-support member, a plurality of valves
and a plurality of nozzles, is advantageously movable in three directions to facilitate
alignment with an underlying receiver. Movement of the dispensing head along two axes is
provided by the simple expedient of elongate holes having their long axes aligned in mutually
15 orthogonal directions. In some embodiments, the valves are tiltable away from the vertical so
that liquid dispensed from such tilted valves is directed at a non-normal angle into a receiver.